

Standard Thread Design

Major Diameter	Threads per Inch	Thread Form	Thread Class/Ext/Int	Left Hand/Righ Hand
1/4	- 28	UNF	- 3B	- LH

Major Diameter
-Nominal Outer Diameter

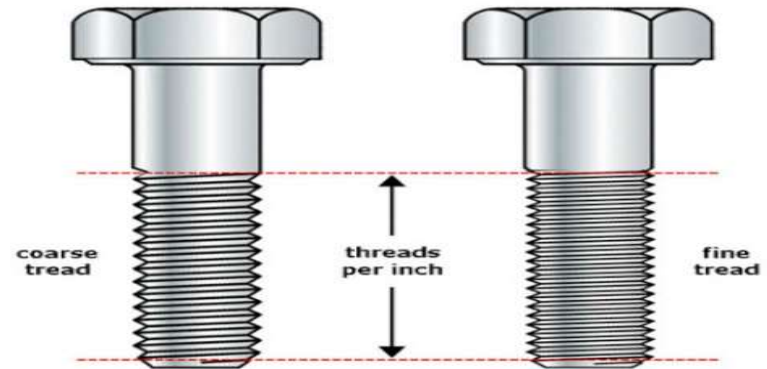
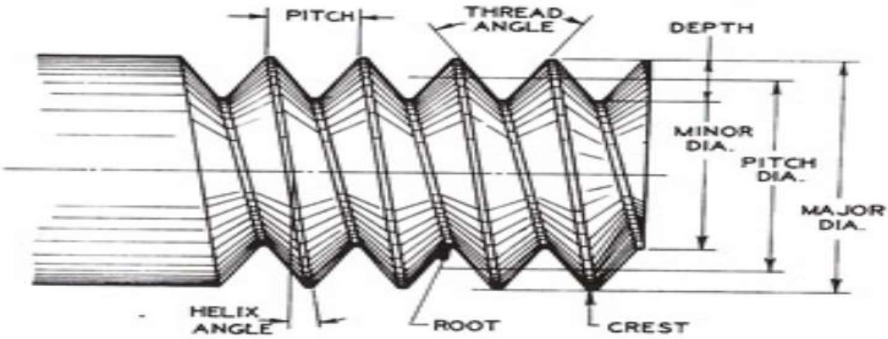
UNF

- High Tightening Capability
- Self-Locking Capability
- Smaller Space Occupation
- Good for anti-vibration Applications

UNC

- High Strength
- High Impact Capability
- Greater Tolerances
- Mass production

Application	Tolerance	Thread Class
Fast/Easy Assy and Dis-assy	1.50% Pitch Diameter	1A
Fast/Easy Assy and Dis-assy	1.50% Pitch Diameter	1B
Majority of Applications	1.10% Pitch Diameter	2A
Majority of Applications	1.10% Pitch Diameter	2B
High-accuracy and Strength	1.80% Pitch Diameter	3A
High-accuracy and Strength	1.80% Pitch Diameter	3B



UNJ vs UN Threads

Specifications:
ANSI/ASME SAE AS8879
ANSI/ASME B1.15

Differences:
-UNJ internal & external threads have rounded root fillets compared to UN threads with flat roots
-UNJ internal thread has larger minor

Outcome:
-UNJ threads have increased fatigue strength
-Round root distributes stress concentration
-Rounded root reduces thread cutter wear to extend tooling life

UN Bolt into UN Nut = **No Problems**
UNJ Bolt into UNJ Nut = **No Problems**
UN Bolt into UNJ Nut = **No Assembly Problems, potential functional problems**
UNJ Bolt into UN Nut = **Interference at**

